

Visualizing Data with Tableau

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Data Visualization Services

[← Back to Research Support](#)

NEED HELP?

> [Ask a question or request a consultation](#)



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Visualization

A good data visualization can expose new patterns and relationships in your data and help you communicate about it more clearly. We can help you:

- > [use visualization spaces and technologies](#)
- > [use GIS and online mapping software](#)
- > [learn how to create more effective data visualizations](#)
- > [visualize research impact](#)

Visualization Spaces

The Libraries provides [spaces and technologies](#) for high-resolution, immersive, 3D, and interactive displays of research data. We provide [boilerplate facilities descriptions](#) for inclusion in grant proposals. [Contact us](#) for more information and assistance.

Outreach and Engagement

Use the Libraries' video walls, high-tech visualization spaces, and events to present your research and engage with the NC State community.

EVENTS

FEB
12

Transforming "Big Data" into "Big Art": a two-part seminar with Astrophysicist Henry "Trae" Winter and Engineer Peter Cheimets

WORKSHOPS

JAN
27

Visualize Your Data with Tableau
3:00 PM to 4:00 PM

JAN
29

Data Cleaning and Analysis Tips and Tools: Excel and Open Refine
11:00 AM to 12:00 PM

FEB
3

Making Network Graphs
3:00 PM to 4:00 PM

FEB
5

Web Mapping with CartoDB
11:00 AM to 12:00 PM

Learning Outcomes

After today, you should be able to:

- upload a dataset to Tableau
- learn about the visualization types available in Tableau
- create multiple visualizations and a dashboard
- publish a visualization
- identify a datapoint as a "Measure" or a "Dimension"
- use an appropriate chart for a given datatype
- find further assistance

If you have any questions, please raise your hand!

What is Tableau? www.tableau.com

- Interactive data visualization and analytics application
- Free and paid versions
- **Tableau Public** is free for everyone
- **Tableau Desktop** is free for students
(<http://www.tableau.com/academic/students>)
- You can create and share graphs, maps, live dashboards
- You can publish anywhere on the web using Tableau Public

How to Use Tableau Public

- Go to this website and create your own account:
public.tableau.com
- Download and install the application
- You will use the application to make the visualizations, and then save them to the web.

Tableau Gallery

Let's see some examples!

public.tableau.com/s/gallery

Today's workshop materials

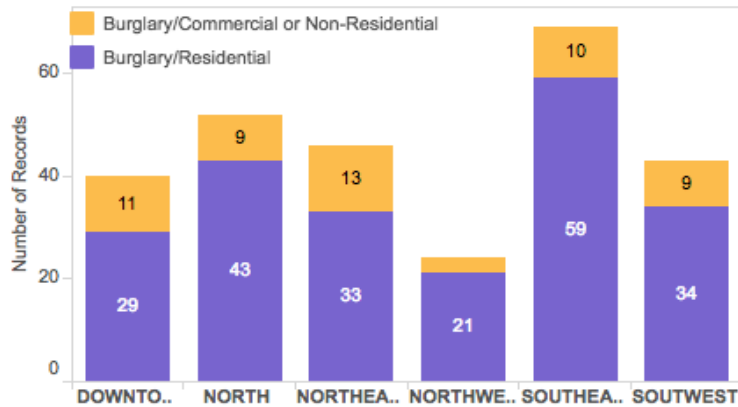
go.ncsu.edu/tableauworkshop

Demo of what we are making today

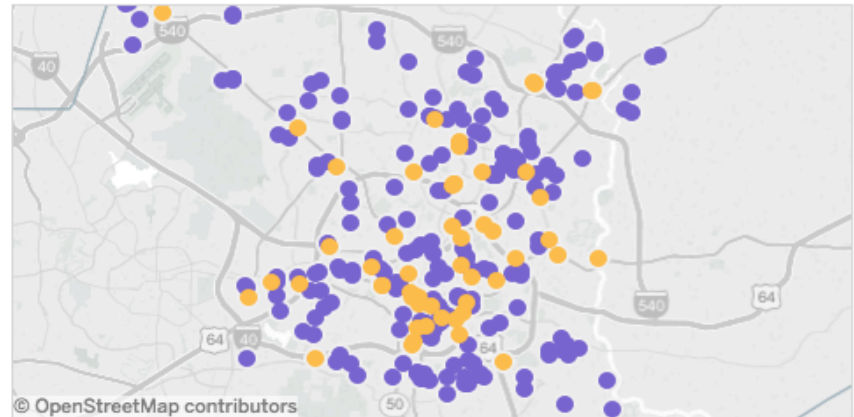
Tracking Home & Business Break-ins

Residents of Southeast and North Raleigh during the Fall of 2015 had a greater chance of their homes getting burglarized than other districts. Businesses had a far lesser chance of being burglarized, especially in Northwest Raleigh.

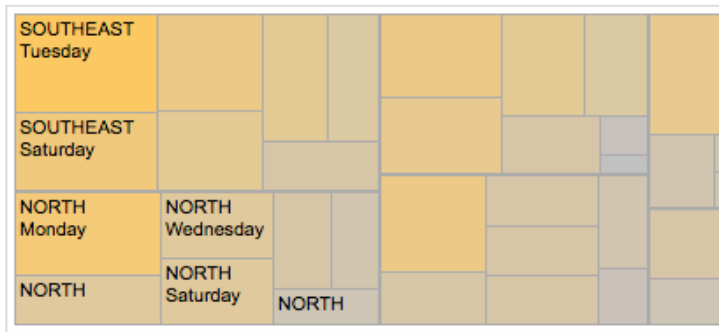
Burglaries by District



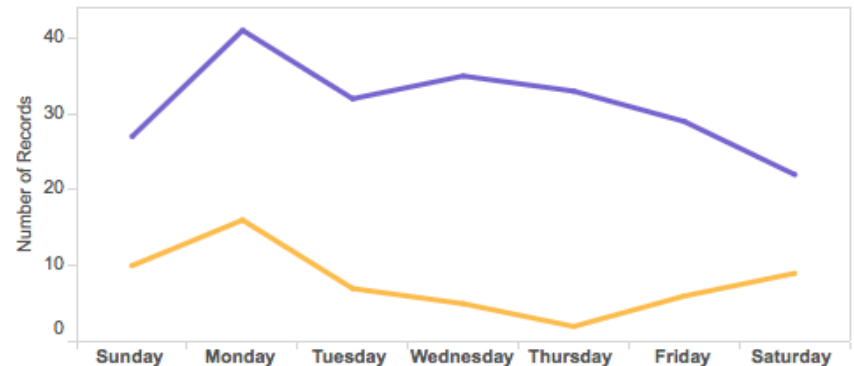
Map



Hotspots



Breakdown by Day of Week



Getting started questions

- Where did the most residential burglaries take place?
- On what days did most burglaries take place -- does this vary by type of burglary?
- What geographic trends are there?

Tableau sample data sets

public.tableau.com/s/resources